Appln. No.: 09/612,797

Amendment Dated: March 8, 2004

Reply to Office Action of: December 9, 2003

MTS-3201US

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

A

- 1-7. (Cancelled)
- 8. (Currently Amended) A method for recording a sequence of multivalued data on a recording medium, comprising the steps of:
- (a) receiving the sequence of multivalued data for consecutive recording on a single track of the recording medium;
 - (b) representing the sequence received in step (a) by a sequence of power levels;
- (c) grouping the sequence of power levels in step (b) into groups, with each group having first, second and third consecutive power levels from the sequence of power levels;
 - (d) averaging the first and third power levels to obtain an averaged power level;
- $(\underline{\text{de}})$ modifying the second power level in each group by a derived value dependent on the <u>first and third power levels in the group averaged power level</u>; and
- (e<u>f</u>) recording on the <u>mediumsingle track</u> the sequence of power levels of step (b) after being modified by step ($\frac{de}{d}$).
- 9. (Currently Amended) The method of claim 8 wherein step ($\frac{de}{d}$) includes the steps of:

averaging the first and third power levels to obtain an averaged power level;

differencing the averaged power level and the second power level to obtain a difference; and

multiplying the difference by a predetermined factor to obtain the derived value.

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10. (New) A method of reducing inter-symbol interference on multivalued data in a read process by adjusting the power of a write pulse in a multivalue write process, comprising the steps of:

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- (a) storing temporarily multivalued data sequentially;
- (b) assigning a write laser power respectively to each multivalue; and
- (c) modifying the write laser powers sequentially using multivalues of a preceding recorded mark value and a following mark value.
- 11. (New) The method of claim 10, wherein step (c) includes a modification quantity determined by an average value of the preceding mark value and the following mark value to be recorded.
- 12. (New) The method of claim 10 wherein after step (c), the following step (d) is performed:
 - (d) recording sequentially on a single track the modified write laser powers.